

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/635,199	08/06/2003	Michael J. Hind	YOR920020048US1 (13310)	8332	
23389 SCULLY SCO	7590 01/25/2008 TT MURPHY & PRESS	EXAMINER			
400 GARDEN CITY PLAZA			WOOD, WILLIAM H		
SUITE 300 GARDEN CIT	Y, NY 11530	•	ART UNIT	PAPER NUMBER	
	,		2193		
		•	MAIL DATE	DELIVERY MODE	
	•	01/25/2008	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

					Al				
Office Action Summary		Application N	No.	Applicant(s)					
		10/635,199		HIND ET AL.					
		Examiner		Art Unit					
		William H. Wo	ood	2193					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHOWHIC - External after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING DA SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period of the reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS 136(a). In no event, he will apply and will expe, cause the application	COMMUNICATION nowever, may a reply be tim- pire SIX (6) MONTHS from to note to become ABANDONED	l. ely filed he mailing date of this c O (35 U.S.C. § 133).					
Status									
1)🛛	Responsive to communication(s) filed on <u>25 O</u>	October 2007.							
2a)⊠	This action is <b>FINAL</b> . 2b) This	s action is non-	final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	ion of Claims		•						
4) Claim(s) 1-8 and 10-17 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-8 and 10-17 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.									
Applicati	ion Papers								
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	cepted or b)  drawing(s) be hetion is required i	eld in abeyance. See f the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 C					
Priority (	ınder 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  **Attachment(s)**  **A									
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5)	Interview Summary Paper No(s)/Mail Da Notice of Informal P Other:	ite. 2007 1011					

Art Unit: 2193

#### **DETAILED ACTION**

Claims 1-8 and 10-17 are pending and have been examined.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As amended the claim jumps from step (a) to step (c), and is thus unclear.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-8 and 10-17 are rejected under 35 U.S.C. 102(a) as being anticipated by **Arnold**, M., "Online Profiling and Feedback-Directed Optimization of JAVA".

Art Unit: 2193

### Claim 1

**Arnold** discloses a method for normalizing a profile collected for an executing application to account for one or more actions applied to the executing application after the profile was collected, the method comprising:

- (a) predicting, <u>based on the profile and one or more actions</u>, an impact on the <u>executing application</u> of applying the one or more actions to the executing application (page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch probabilities"; page 73, line 23 to page 74, line 1, "approximate reasonable edge counts throughout compilation"); and
- (b) adjusting the profile to form a normalized profile according to the predicted impact (page 72, line 24 page 73, line 6, page 75, figures 5.3 and 5.4).

#### Claim 2

Arnold discloses a system for normalizing a profile collected for an executing application to account for one or more actions applied to the executing application after the profile was collected, the system comprising:

a predictor for predicting, based on the profile and the one or more actions, an impact on the executing application of applying the one or more actions to the executing application (page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch probabilities"); and

Art Unit: 2193

an adjuster for adjusting the profile to form a normalized profile according to the predicted impact (page 72, line 24 - page 73, line 6, page 75, figures 5.3 and 5.4).

## Claim 3

**Arnold** discloses a method for adjusting a profile collected for an executing application to account for one or more actions applied to the executing application to improve detection of phase shifts in the executing application after the profile was collected, the method comprising:

- (a) collecting a first profile for the executing application (page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch probabilities");
- (b) predicting, <u>based on the profile and the one or more actions</u> an impact on the <u>executing application</u> of applying the one or more actions to the executing application (page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch probabilities");
- (c) adjusting the first profile to form a normalized profile according to the predicted impact (page 72, line 24 page 73, line 6, page 75, figures 5.3 and 5.4);
- (d) applying the one or more actions to the executing application (page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch

Application/Control Page 5

Number: 10/635,199

Art Unit: 2193

probabilities");

(e) collecting a second profile for the executing application (page 72, line 24 -

page 73, line 6); and

(f) detecting a phase shift in the executing application by utilizing the

normalized profile and the second profile (page 72, line 24 - page 73, line 6).

Claims 4, 7 and 8

The limitations of claims 4, 7 and 8 substantially correspond to the limitations

of claims 1-3 and as such are rejected in a corresponding manner.

Claim 10

**Arnold** discloses the method of claim 1, wherein the step of predicting is

performed using a cost-benefit model (page 11, first line under "Controller"

Model"; page 68, section 5.3.1, first paragraph).

Claim 15

Arnold discloses the method of claim 3, wherein the step of predicting is

performed using a cost-benefit model (page 11, first line under "Controller

Model"; page 68, section 5.3.1, first paragraph).

Claim 16

Art Unit: 2193

**Arnold** discloses the method of claim 3, further including: selecting the one or more actions for applying to the executing application (page 11, first line under "Controller Model"; page 72, lines 2-5; page 73, 4-5; page 77, lines 2-8; additionally page 73, lines 16-22, "branch probabilities").

#### Claim 17

**Arnold** discloses the method of claim 16, wherein the step of selecting is performed using a cost-benefit model (page 11, first line under "Controller Model"; page 68, section 5.3.1; first paragraph).

## Response to Arguments

Applicant's arguments with respect to claims 1-8 and 10-17 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the

Art Unit: 2193

advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 10:00am - 4:00pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571)-272-3756. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained form either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR systems, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. For questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)305-3900.

WILLIAM WOOD
PRIMARY EXAMINER

William H. Wood Patent Examiner AU 2193

January 18, 2008